

Some plants new to the Flora of Punjab Plains¹

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During the last thirteen years, I have been collecting plants from Punjab Plains. A critical and comparative perusal of the literature dealing with the plants of Punjab and the contiguous areas (Stewart 1869, Hooker *et al.* 1872-97, Collett 1902, Bamber 1916, Parker 1918, Sabnis 1940-41, Stewart 1945, Duthie 1960, Nair & Nair 1963-66, Rau 1968, Singh 1971, Bor 1973) has revealed that the 75 species belonging to 67 genera and 37 families enumerated below have not been reported previously from Punjab plains. The voucher herbarium specimens have been deposited in the herbaria of Panjab University Chandigarh (collected during July 1963 to April 1966 and indicated by a single asterisk), Punjab Agricultural University, Ludhiana (collected during May 1966 to September 1968 and indicated by double asterisks) and Punjabi University, Patiala (collected ever since October 1968, devoid of any asterisk mark). But for the minor modifications, the arrangement of the families adopted here is the same as in Hookee *et al.* (1872-97).

CRUCIFERAE

Brassica campestris L. var. **sarson** Prain. In waste places and fields. Fl. & Fr. Nov.-Mar. M. Sharma 458**, 750, 4514.

B. juncea Czern. & Coss. Rare in waste places and fields. Fl. & Fr. Dec.-May. M. Sharma 441**, 4526, 4550.

¹ Accepted September 1976.

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Descurainia sophia Prantl. Common weed in waste places at Kapurthala. Fl. & Fr. Feb.-Apr. O. P. Sharma 4214.

VIOLACEAE

Hybanthus enneaspermus F. Muell. Among grasses, rare to common. Fl. & Fr. June-Oct. M. Sharma 2052, 2843, 3979, 4284.

CARYOPHYLLACEAE

Cerastium glomeratum Thuill. Rare. Fl. & Fr. Feb.-Mar. M. Sharma 2554.

MALVACEAE

Abutilon grandifolium Sweet. Rare. Fl. & Fr. Jan.-May. M. Sharma 3795, 3796.

Pavonia zeylanica Cav. Rare. Fl. & Fr. Aug.-Oct. M. Sharma 1495, 2944.

STERCULIACEAE

Melochia corchorifolia L. Common in moist waste places. Fl. & Fr. July-Oct. M. Sharma 1577, 2158, 3577, 4039.

TILIACEAE

Triumfetta pentandra A. Rich. Very common in waste places. Fl. & Fr. Aug.-Oct. M. Sharma 211**, 528, 1626, 2166, 4042, 4330.

GERANIACEAE

Geranium rotundifolium L. Very common near Pathankot. Fl. & Fr. Feb.-Apr. M. Sharma 3854.

VITACEAE

Ampelocissus latifolia Planch. Occasional.
Fl. & Fr. July-Nov. M. Sharma 1463, 2936.

PAPILIONACEAE

Lotus corniculatus L. Fairly common in
Ludhiana. Fl. & Fr. Mar.-May. M.
Sharma 638**.

Rhynchosia rothii Aitchis. Rare. Fl. & Fr.
Aug.-Nov. M. Sharma 2959, 4037, 4371.

Trigonella incisa Benth. Very common weed.
Fl. & Fr. Dec.-Apr. M. Sharma 2387*,
446**, 225, 2017, 3876, 3904.

MIMOSACEAE

Mimosa himalayana Gamble. Rare. Fl. &
Fr. July-Oct. M. Sharma 2222, 2264, 3568.

ONAGRACEAE

Epilobium hirsutum L. Rare. Fl. & Fr. Aug.-
Oct. M. Sharma 3792, 4036.

Hartmannia rosea G. Don. Rare. Fl. & Fr.
Mar.-May. M. Sharma 3497, 4224.

CUCURBITACEAE

Blastania fimbristipula Kotschy & Peyr. Very
rare. Fl. Sept. M. Sharma 4364.

UMBELLIFERAE

Apium graveolens L. Common near Budha
Nala, Ludhiana. Fl. & Fr. Mar.-May.
M. Sharma 641**, 1898, 2682.

Torilis japonica DC. Common at Manimajra,
Chandigarh. Fl. & Fr. Feb.-Apr. M.
Sharma 1679*.

RUBIACEAE

Oldenlandia brachiata Hook. f. Common
among grasses. Fl. & Fr. Aug.-Oct. M.
Sharma 2792*, 776**, 589, 1465, 1518, 1544.

COMPOSITAE

Acanthospermum hispidum DC. Rare to
common and gregarious. Fl. & Fr. Aug.-
Oct. M. Sharma 1662, 2516, 3557, 4306.

Ageratum houstonianum Mill. Common. Fl. &
Fr. Sept.-Apr. M. Sharma 941**, 1743,
3457.

Cirsium wallichii DC. var. *fasciculata* (Hook. f.)
M. Sharma Comb. nov. *Cnicus wallichii*
Hook. f. var. *fasciculata* Hook. f. in Fl. Brit.
India 3 : 364, 1881.

Fairly common in Bir Chhatt, Patiala. Fl. &
Fr. Mar.-May. M. Sharma 3520.

Galinsoga parviflora Cav. Very rare. Fl. &
Fr. Jan.-Feb. M. Sharma 2418.

Lactuca disciceta D. Don. Common weed in
waste places and orchards. Fl. & Fr. Feb.-
Apr. M. Sharma 1684*, 569**, 1783, 2014,
2555, 2698, 3233, 3445, 3937.

L. serriola L. Fairly common in shady waste
places. Fl. & Fr. Apr.-June. M. Sharma
39**, 2042, 3964.

Lagascea mollis Cav. Very rare. Fl. & Fr.
Sept.-Dec. M. Sharma 2500*.

Launaea resedifolia Druce. On sand dunes.
Fl. & Fr. Apr.-June. M. Sharma 4542.

Parthenium hysterophorus L. Rare to abundant.
Fl. & Fr. Apr.-Oct. M. Sharma 2701, 2724
3106, 3216, 3977.

OLEACEAE

Jasminum auriculatum Vahl. Rare in hedges.
Fl. & Fr. July-Sept. M. Sharma 2683*,
2072, 2122.

APOCYNACEAE

Catharanthus pusillus G. Don. Fairly common
in fields and waste places. Fl. & Fr. Augs-
Oct. M. Sharma 2246*, 332**, 540, 2113.
3550, 3748.

FLORA OF PUNJAB PLAINS

EHRETIACEAE

Ehretia aspera Roxb. Common in waste place and hedges. Fl. & Fr. Mar.-Nov. M. Sharma 2458*, 86**, 1785, 1713, 1851, 3925.

CONVOLVULACEAE

Ipomoea cairica Sweet var. *indica* Hall. f. Naturalized among hedges and forests. Fl. & Fr. Almost throughout the year. M. Sharma 2077*, 232**, 2046, 4239, 4275.

I. fistulosa Choisy. Naturalized in watery places. Fl. & Fr. Mar.-Dec. M. Sharma 2353*, 31**, 960, 1470, 3467, 4345.

I. pes-tigridis L. var. *capitellata* Cl. Fairly common weed. Fl. & Fr. Aug.-Oct. M. Sharma 2783*, 354**, 506, 1354, 1612.

Merremia dissecta Hall. f. Among hedges. Fl. & Fr. Apr.-Nov. M. Sharma 339**, 1674, 2292, 2806, 3791.

SOLANACEAE

Datura stramonium L. Rare. Fl. & Fr. Aug.-Oct. M. Sharma 2498*, 1348, 2523.

Nicotiana plumbaginifolia Viv. Widespread weed. Fl. & Fr. Feb.-July. M. Sharma 1690*, 633**, 921, 2079, 2679, 3262.

SCROPHULARIACEAE

Lindernia verbenifolia Pennell. Rare. Fl. & Fr. Aug.-Sept. M. Sharma 2710.

Verbascum thapsus L. Rare but scattered. Fl. & Fr. Sept.-Nov. also Mar.-May. M. Sharma 778**, 2524, 2704, 3527.

PEDALIACEAE

Pedaliium murex L. Rare. Fl. & Fr. July-Sept. M. Sharma 1369.

ACANTHACEAE

Blepharis maderaspatensis Roth. Rare. Fl. & Fr. Mar.-May. M. Sharma 2215*, 2803, 3472.

Dicliptera verticillata Christens. Rare. Fl. Mar.-Apr. M. Sharma 1799.

Hemigraphis hirta T. Anders. Common in Patiala district. Fl. & Fr. Mar.-June. M. Sharma 1803, 1845, 2010, 2628.

Lepidagathis cuspidata Nees. Rare. Fl. & Fr. Mar.-Apr. M. Sharma 2444*, 4240.

VERBENACEAE

Premna barbata Wall. ex Schau. Common in Bir Chhatt, Patiala. M. Sharma 4308.

LABIATAE

Ocimum canum Sims. Rare. Fl. & Fr. July-Oct. M. Sharma 2226*, 768*, 1410, 3565.

PLANTAGINACEAE

Plantago pumila Willd. Rare. Fl. & Fr. Feb.-Apr. M. Sharma 855, 3281.

AMARANTHACEAE

Achyranthes aspera L. var. *porphyristachya* Hook f. Fairly common in Patiala district. Fl. & Fr. July-Nov. M. Sharma 1637, 2989, 3081, 3757.

Alternanthera ficoidea Griseb. Rare to abundant. Fl. & Fr. Almost all the year round. M. Sharma 3107, 3222, 3230, 4248.

EUPHORBIACEAE

Croton bonplandianum Baill. Very common in waste places. Fl. & Fr. Mar.-Nov. M. Sharma 2198*, 118**, 142, 1397, 3505, 3959.

Euphorbia serpens H.B. & K. Common in Punjabi University Campus. Fl. & Fr. Mar.-Nov. M. Sharma 3540, 3556, 3785, 4279.

Kirganelia reticulata Poir. Rare. Fl. & Fr. Mar.-May. M. Sharma 4206, 4237.

URTICACEAE

Pouzolzia pentandra Benn. Rare to very common. Fl. & Fr. July-Nov. M. Sharma 2051*, 760**, 962, 1338, 2890, 3989.

ORCHIDACEAE

Eulophia hormusjii Duthie. Rare to common. Fl. Mar.-Apr. M. Sharma 1691*, 562**, 3487, 3872.

DIOSCOREACEAE

Dioscorea bulbifera Linn. Common in Bir Chhatt, Patiala. Fl. & Fr. July-Nov. M. Sharma 3763, 4299.

PONTEDERIAACEAE

Eichhornia crassipes Solms. Very common in ponds. Fl. Aug.-Nov. also Apr.-May. M. Sharma 389**, 2114, 2651, 4379.

COMMELINACEAE

Commelina forskalaei Vahl. Rare. Fl. & Fr. July-Sept. M. Sharma 2103.

C. undulata R. Br. Fairly common. Fl. & Fr. July-Oct. M. Sharma 1472, 2151, 2270, 2996, 3079.

ALISMATACEAE

Alisma plantago L. Rare. Fl. Mar. M. Sharma 3866.

POTAMOGETONACEAE

Potamogeton perfoliatus L. Fairly common. Fl. & Fr. Jan.-Apr. M. Sharma 2538, 2550, 3280.

CYPERACEAE

Cyperus alulatus Kern. Very common weed. Fl. & Fr. Aug.-Oct. M. Sharma 2277*, 278**, 343, 941, 3732, 4013, 4334.

C. atkinsonii Cl. Rare. Fl. & Fr. July-Oct. M. Sharma 2992, 3073, 3102.

Eleocharis acutangula Schult. Rare. Fl. & Fr. Aug.-Oct. M. Sharma 3548, 3775.

GRAMINEAE

Chloris montana Roxb. Rare to common. Fl. & Fr. July-Oct. M. Sharma 359, 1365, 1493.

C. virgata Sw. Common in Patiala district. Fl. & Fr. July-Oct. M. Sharma 995, 1572, 2534, 3086.

Chrysopogon fulvus Chiov. Rare. Fl. & Fr. Aug.-Oct. M. Sharma 2302*, 3765, 4305.

Cymbopogon parkeri Stapf. Very rare. Fl. & Fr. July-Sept. M. Sharma 2513.

Digitaria longiflora Pers. Rare. Fl. & Fr. Aug.-Oct. M. Sharma 2721, 3213.

D. stricta Roem. & Schult. Common. Fl. & Fr. July-Oct. M. Sharma 2748*, 1429, 1481, 2297, 3087, 4380.

Dinebra retroflexa Panz. Fairly common in Patiala district. Fl. & Fr. Aug.-Oct. M. Sharma 2705, 3208.

Eriochloa nubica Thell. Common. Fl. & Fr. July-Oct. M. Sharma 2081, 2115, 2706, 2726, 2951, 3108, 3206, 3582.

Lasiurus indicus Henr. On sand dunes.
Fl. & Fr. Apr.-June. M. Sharma 4543.

Leersia hexandra Sw. Rare. Fl. & Fr. Aug.-
Nov. also Apr.-May. M. Sharma 393**,
2893, 3452.

Panicum maximum Jacq. Common in Bir
Mehas, Patiala. Fl. & Fr. Aug.-Nov.
M. Sharma 1372, 2288, 4356.

ACKNOWLEDGEMENTS

I am indebted to the Heads of Botany departments of Panjab, Punjabi and Punjab Agricultural universities for assistance, to the authorities of Forest Research Institute, Dehra Dun, National Botanic Gardens, Lucknow and Central National Herbarium, Howrah for herbarium and library facilities and to the Director, Royal Botanic Gardens, Kew for getting some of the plants identified.

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